Regional Transportation Operation Coalition Draft Work Plan (v4)

For Consideration by CMAP Transportation Committee and Freight Committee

January, 2010

I. Mission Statement

The Northeastern Illinois Regional Transportation Operations Coalition (RTOC) will serve as a forum for collaboration to advance multi-modal transportation systems operations.

II. Introduction

A. Coordinating Transportation Operations in Northeastern Illinois

This work plan describes how the transportation operators and planners from northeastern Illinois will enhance collaboration and coordination of regional transportation system operations. Such coordination will help to facilitate an efficient transportation system across the northeastern Illinois region.

Recent Transportation System Development (TSD) plans have focused on creating and maintaining seamless transportation systems across the northeastern Illinois region. Coordinated management and operation of the transportation infrastructure, resources, and services is an essential element to achieving this goal. The purpose of the proposed Regional Transportation Operations Coalition (RTOC) is to establish an institutional forum and structure where regional operations can be addressed. With collaboration and coordination between transportation operators the region would experience a more efficient and safe transportation system across jurisdictional boundaries. Regional agencies realize there is a benefit of such a forum which will allow for a more streamlined approach to operating the regional transportation network.

Transportation operators effectively manage the existing transportation network to ensure all users experience a smooth, safe and efficient regional transportation system. Ideally, this can be achieved by optimizing the existing regional transportation system through the collaboration of transportation operators and emergency responders,

regardless of jurisdictional boundaries or transportation mode. Another important aspect to efficient transportation operations is project coordination at the regional level to ensure a seamless and logical transportation network. The efficient operation of the transportation system is quickly becoming critically important in regions with increasing congestion and the lack of available funding to significantly expand transportation capacity.

Transportation operators have a variety of strategies that help them achieve a more efficient system which include:

- Traveler information services
- Freeway management
- Transit priority signal systems
- Active traffic signal and arterial management
- Incident management
- Road weather management
- Work zone management
- Freight and flight management

The effectiveness of each strategy is evaluated through regionally agreed-upon performance measures. Locally and regionally collected data and analytical tools will be used to create performance measures that will assist all operators to continuously monitor the transportation network in real-time and track changes to the network over time.

A regional data archive would be the central source for regional transportation-related data. A web-based archive is essential for transportation operators to share consistent data region-wide on a near real-time basis. The data archive would also allow for consistent performance measures and facilitate the establishment of analysis tools to evaluate the transportation system, regardless of jurisdictional boundaries or mode of transportation. A regional data archive has the ability to assist transportation operators and planners with the study, development, implementation and tracking of innovative solutions to recurring and non-recurring congestion, emergencies, freight delays and multi-modal issues.

Transportation system operators, planners and emergency responders would all benefit from actively participating in the RTOC. The active collaboration and coordination of these groups are crucial for the RTOC to be successful. Transportation planners would gain a better understanding of the day-to-day operations of a transportation system and how operational strategies can improve the development of regional transportation goals, objectives and priorities. Transportation operators would have increased input into the planning process, which would allow them to develop and implement projects and pursue operation strategies to meet the vision and goals of the region's

transportation plans. Emergency responders will see the benefits of working with operators to redirect traffic when incidents or emergencies occur. These benefits should be clearly identified to each participating agency along with the users of the regional transportation system.

B. Associated CMAP Committees

With the former Gary-Chicago-Milwaukee (GCM) Corridor Coalition now focusing on Interstate highway activities and facilities, a need has emerged to develop an institutional forum and structure where regional operations can be addressed, including the coordination with counties and local communities. The members of the Advanced Technology Task Force (ATTF) Group realized a need for the creation of RTOC. An Operations Group Development Sub-Committee consisting of Advanced Technology Task Force (ATTF) members and CMAP staff was formed to discuss the need for a regional operations group and how the operations group should be structured. The development sub-committee and CMAP staff agreed there was indeed a need for the regional operations group and propose developing an institutional structure for the RTOC.

RTOC would be associated with and act as a unified voice regarding transportation operations issues for the following committees:

- Advanced Technology Task Force (ATTF)
- Bicycle and Pedestrian Task Force
- Freight Committee
- Council of Mayors

In addition, to assure that congestion management needs are addressed, RTOC would be represented on:

• Transportation Committee

Further, participation in CMAQ Project Selection Committee meetings and other regional processes, as appropriate, would be an integral part of this process.

A major component of each of the above committees is related to transportation operations and all would benefit being involved in a management and operations group. RTOC, along with the associated committees will work together to present the benefits of management and operations projects to decision-makers, transportation professionals and the traveling public and assist in setting priorities for management and operations projects and strategies that support the TSD plan and the Congestion Management Process.

The RTOC would meet regularly, but not less frequently than quarterly, to discuss regional operations issues, needs and priorities. It will also coordinate regional management and operations projects and strategies.

The ATTF meets quarterly and is charged to "Identify, assess, promote and assist with the implementation of intelligent transportation systems and advanced technologies as part of the transportation system. Provide overall guidance for the development of the Advanced Technologies component of the Regional Transportation Plan." The RTOC would work in conjunction and compliment the ATTF to promote Intelligent Transportation Systems (ITS) and advanced technologies tools which will be used in the management and operations of the region's transportation network. The ATTF will continue to oversee and manage the regional ITS architecture and its implementation. It should be noted that many of the current members of the ATTF already serve as core members of the fledging RTOC.

The Freight Committee meets 8 times per year and is charged to "Identify, assess and respond to goods movement travel issues and opportunities and provide overall guidance for the development of the regional goods movement component of the Regional Comprehensive Plan. Examples of key issues include safety, congestion relief, air quality, economic development, and community impacts." Transportation management and operations are a vital component to increasing the efficiency in which goods move across and throughout our region. In conjunction with the freight committee, the RTOC will work on strategies and physical facility improvements to facilitate the movement of goods through the region. The freight industry would benefit from many management and operations improvements such as congestion relief, traveler information services, road weather management and traffic signal management on freight-significant corridors.

The Bicycle and Pedestrian Task Force meets quarterly and is charged to "Identify, assess and address bicycle and pedestrian travel issues and provide overall guidance for the development of the regional bicycle and pedestrian program. Examples of key issues include safety, convenience, economic development, and access for people with disabilities." The Bicycle and Pedestrian Task Force would benefit from operational improvements such as traffic signal management and arterial management. One major aspect of the RTOC will be to look at signal timing and coordination throughout the region. Additionally, it is expected that the RTOC will look at alternative methods to control traffic beyond traditional traffic signals (e.g. roundabouts, single-point urban interchanges, etc.) that improve operations while improving safety for non-motorized travel.

C. Work Program

The RTOC would encompass all the aspects of transportation management and operations in the northeastern Illinois region. The coalition would help advocate for the collaboration and coordination in:

- Regional data archiving and system monitoring
- Traffic signalization improvement, including transit signal priority, as appropriate
- Freight/intermodal management
- Arterial management
- Freeway management
- Cooperative funding
- Project implementation (construction coordination)
- Innovative operations project identification
- Bottleneck identification and elimination
- Transportation safety and security

III. Goals and Objectives

A. Goal: Foster collaboration and coordination among the region's transportation operators.

Objectives:

- Hold well attended bi-monthly/quarterly meetings.
- Establish a working committee with members from all stakeholders including emergency response agencies.
- Publish annual report outlining RTOC accomplishments and upcoming objectives.

B. Goal: Identify overlapping needs for operational improvements to better leverage investments

Objectives:

- Identify and promote opportunities for operational improvements to the transportation network.
- Identify funding streams for multiple agencies to apply for (Economies of scale).
- Survey agencies for overlapping needs.

C. Goal: Reduce barriers to operational improvements on the region's multi-modal transportation system

Objectives:

- Assist officials in recognizing the benefits of coordinating transportation operations on a regional level.
- Develop a working relationship between operations and planning staff.
- Identify barriers to implementation, including but not limited to: organizational, political, financial, technological and environmental.

D. Goal: Create a forum to discuss data needs and assure appropriate data sharing

Objectives:

- Continue to enhance Gateway as needed.
- Create and maintain a regional data archive for operators to store and retrieve operations data.
- Promote benefits and uses of data archive to all transportation agencies.
- Compile regional operations data for decision-makers to use in programming future projects.

E. Goal: Affect improvements to the operation of the transportation system

Objectives:

- Monitor and implement the region's Congestion Management Process.
- Identify critical system components where targeted improvements will have significant positive impacts on the overall system operation.
- Identify methods and technologies that have a high benefit/cost ratio.
- Work with our partners to systematically program and implement operational improvements on an ongoing basis.

F. Goal: Promote best practices for operations

Objectives:

- Become example for other regions to follow State of the Practice.
- Identify and promote operations related training opportunities.
- Prepare periodic strategy evaluations.
- Support and implement operations-related demonstrations.
- Support widespread adoption of best practices.
- Develop/identify funding sources for operations.

IV. Resources and Constraints

A. Resources

- Participating agencies
- CMAP staff support
- Prior work
- Federal assistance
 - Staff support
 - Training
- Other regions experience

B. Constraints

- Lack of dedicated operations funding
- Unusual role for MPO for past 15 years in Chicago

V. Plan of Action

The creation of the Regional Transportation Operations Coalition will require buy in from not only multiple transportation operators and planners in the region, but also many emergency responders and the members of the freight industry. The RTOC will institute an open forum for agencies to share ideas, promote innovative operations solutions and foster relationships between the member agencies. CMAP and its partners will need to:

- Institutionalize the Regional Transportation Operations Coalition.
 - Establish the working committee under the CMAP committee structure.
 - Identify RTOC staffing resources.
- Identify potential RTOC participants.
- Engage identified participants.

- Create RTOC structure and agreements.
 - o Establish committee chair and co-chair.
 - Establish Transportation Committee representatives.
 - o Create Memorandum of Understanding and/or Agency agreements.
- Committee processes and products.
 - Create forum for agencies to share ideas and create relationships.
 Sample of potential focus areas:
 - Multi-modal arterial traffic operations, including transit signal priority and bike-ped traffic signal operations.
 - Freight management.
 - Arterial incident management.
 - Create forum for agencies to collaborate on operations related projects.
 Sample of potential projects:
 - Regional data archive.
 - Establish champion.
 - Freight management (e.g Create for trucks).
 - Establish champion.
 - Arterial incident management strategies.
 - Establish champion.
 - Transit signal priority.
 - Establish champion.
 - Advanced Traveler Information Systems.
 - Establish champion.
 - Establish and adopt region-wide accepted operations performance measures.
 - Monitor established performance measures and identify areas in need of improvement
- Secure funding for ongoing operations related projects.
- Perform periodic review of committee performance.

VI. Schedule

December 2009: Initial group development and review and finalize work plan

January 2010: Finalize work plan and present to Planning and Transportation Committee

February 2010: Present to Programming Coordinating Committee

March 2010: Present to MPO Policy Committee and CMAP Board

April 2010: Implementation of the new structure of the Regional Transportation Operations Coalition.